

IAP20 Rec'd PCT/PTO 24 JAN 2006

AMENDMENT UNDER PCT ARTICLE 34

With respect to International Application No.
PCT/JP2004/010619, filed on July 26, 2004, the applicant
5 canceled sheet 6 of the Description entirely and
submitted substitute sheets 6-1 and 6-2 of the
Description which are attached hereto. Explanation of
some related art documents is added (line 13 of sheet 6-
1 to line 2 of sheet 6-2).

Engineers Technical Research Report MI2000-75, 2001,
pp.145-149

- Tsunashima H, Befu S, Arai Y "Stereoscopic
Image Construction Method" (Japanese Patent Application
5 No. 2000-358420), 2000

- Befu S, Tsunashima H, Arai Y: "A Study in 3-
Dimensional Image Processing Method for 3 DX Multi Image
Micro CT", CARS2001, 2001, pp.665-670

- Tsunashima H, Befu S, Yamada A, Arai Y: "3-
10 Dimensional Image Construction Method In Small X-ray
Calculated Tomography for Dental Use", Med. Imag. Tech.
21:157-165, 2003.

PCT International Application Publication No.
WO02/43001 discloses a 3DX device which has been
15 proposed by the present inventors.

Japanese Laid-Open Patent Application No. 02-
118887 discloses a method for displaying a 3-dimensional
image based on tomographic data. Specifically, data of
an undesired object or missing are eliminated by using
20 connectivity of tomographic data, and then data of a
target object concerned are recognized by using
selection of a specified region.

Japanese Laid-Open Patent Application No. 63-
118990 discloses a method for generating a 3-dimensional
25 image based on parallel slice data. In this method, a
connectivity of 2-dimensional image portions between
adjacent slice data is used to generate a 3-dimensional
image.

The methods of Japanese Laid-Open Patent
30 Applications No. 02-118887 and No. 63-118990 are related
to the slice data correction processing, and there is no
teaching in this document of calculating the integrated
value of consecutive voxels in a 3-dimensional CT data

without changing the 3-dimensional CT data for the correction as in the present invention.

DISCLOSURE OF THE INVENTION

5 However, as for the methods in the above-mentioned documents, it is found as a result of examining the reconstructed 3-dimensional image that separation of a mandibular condyle head and a mandibular fossa in the reconstructed 3-dimensional image of a
10 mandible part is not performed adequately.

 Accordingly, a general object of the present invention is to provide an image processing method in which the above-mentioned problems are eliminated.

 A more specific object of the present
15 invention is to provide an image processing method and a computer-readable recording medium in which an image processing program is recorded which is capable of performing separation of separate blocks in the reconstructed image of a 3-dimensional object adequately
20 when processing 3-dimensional CT data obtained from the 3-dimensional object.

 In order to achieve the above-mentioned objects, the invention as claimed in claim 1 provides an image processing method which processes 3-dimensional CT
25 data